

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,999,555 B2
APPLICATION NO. : 10/663009
DATED : February 14, 2006
INVENTOR(S) : Morf

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The title page showing the illustrative figure should be deleted to be replaced with the attached title page.

The drawing sheets, consisting of Figs. 1-4, should be deleted to be replaced with the drawing sheets, consisting of Figs. 1-4, as shown on the attached pages.

Signed and Sealed this

Twenty-seventh Day of May, 2008

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with the first name "Jon" and last name "Dudas" clearly legible, and "W." in the middle.

JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Morf

(10) Patent No.: **US 6,999,555 B2**
(45) Date of Patent: **Feb. 14, 2006**

(54) **SYSTEMS AND METHODS FOR
PROCESSING DATA**

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(73) Assignee: Varian Medical Systems Imaging
Laboratory GmbH, (CH)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 92 days.

(21) Appl. No.: 10/663,009

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(65) **Prior Publication Data**
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(51) Int. Cl.
G01N 23/02 (2006.01)
G01N 23/083 (2006.01)

(52) U.S. Cl. 378/62; 378/901

(58) Field of Classification Search 378/4,
378/8, 15, 19, 62, 65, 901

See application file for complete search history.

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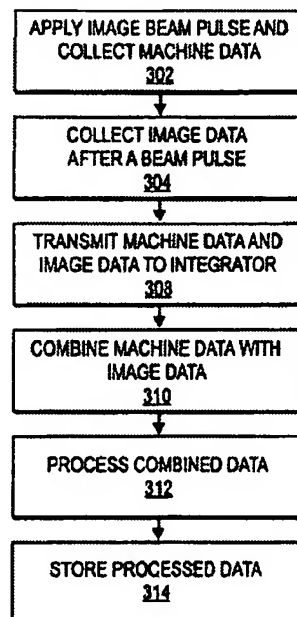
Primary Examiner—David V Bruce

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(57) **ABSTRACT**

A method for processing data in a radiation procedure includes obtaining operation data, and formatting the operation data into a set of image data, wherein the operation data comprises one or a combination of a gantry angle, a patient position, a patient orientation, radiation dose rate, radiation dose fraction, beam pulse rate, beam energy, time when beam was activated, time when beam was deactivated, and beam variation (if any) during an image readout. Also machine axis information, machine status info and operation data from other systems like for instance the RPM system may be included. A method of processing data in a radiation procedure includes obtaining operation data, obtaining an image data, and combining the operation data with the image data in substantially real time.

53 Claims, 4 Drawing Sheets



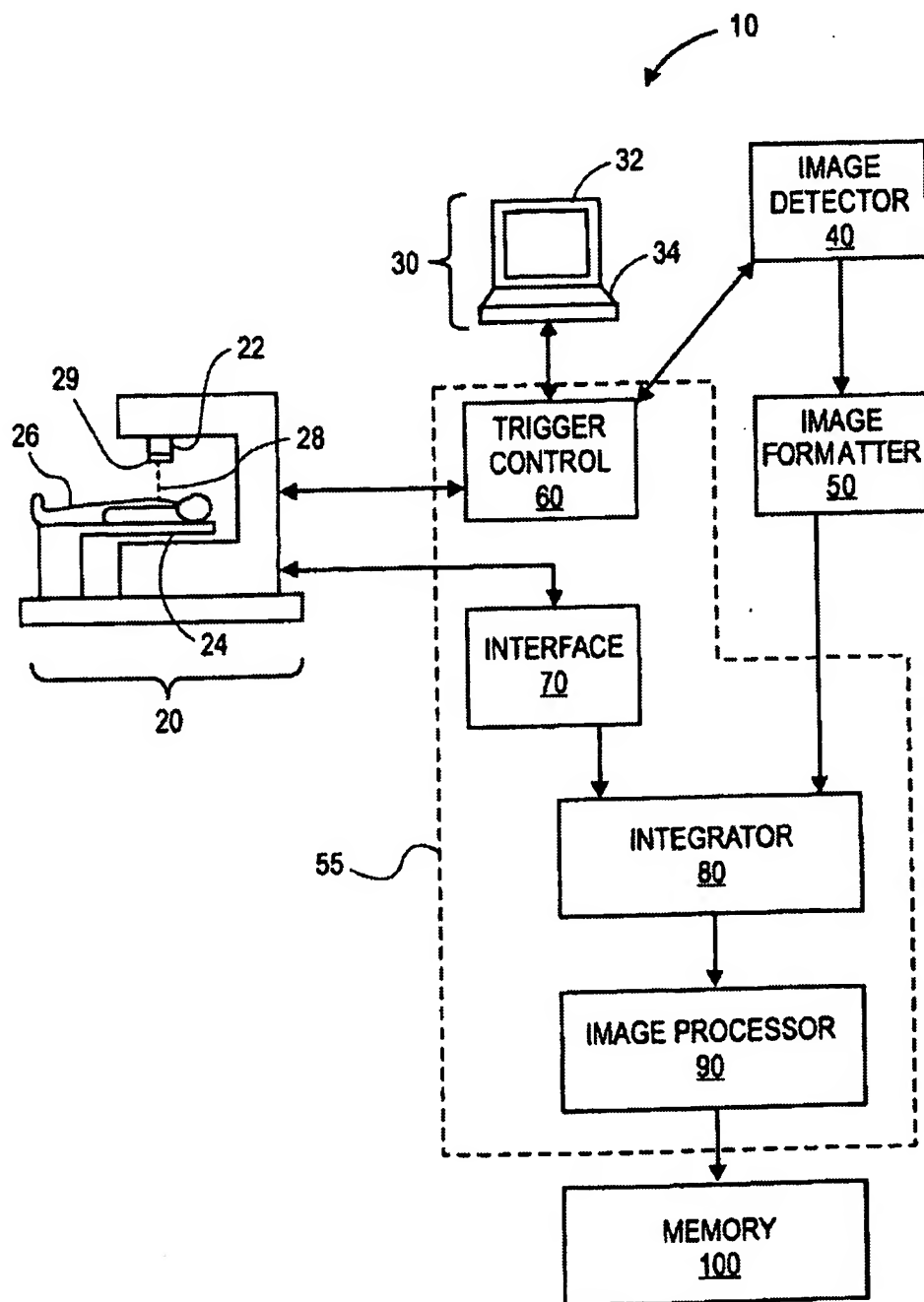
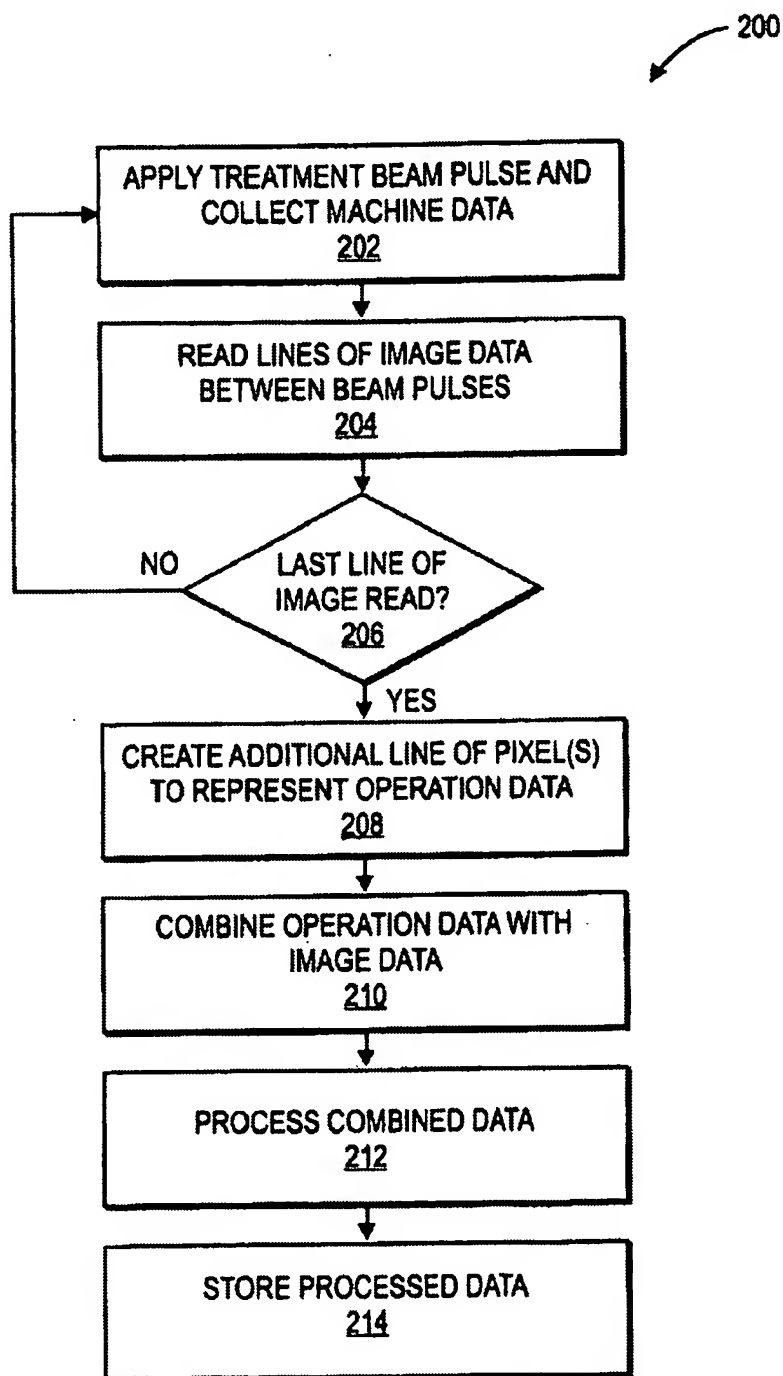


FIG. 1

**FIG. 2**

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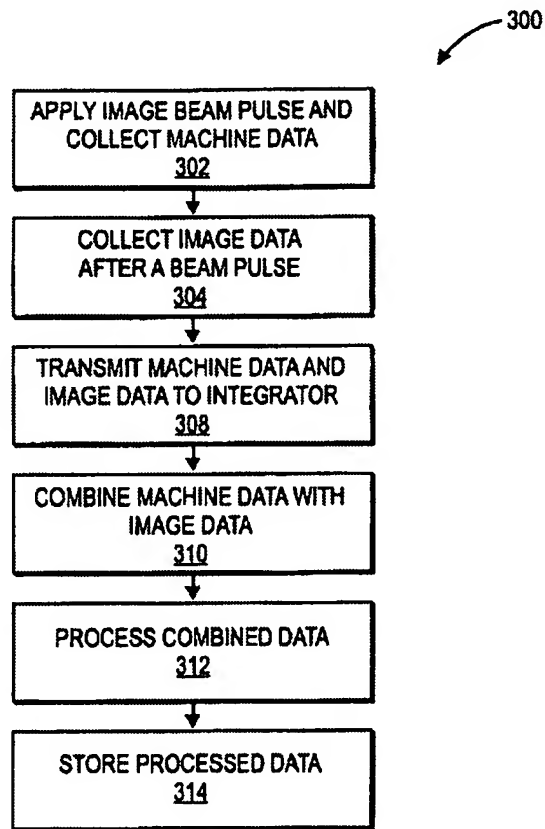
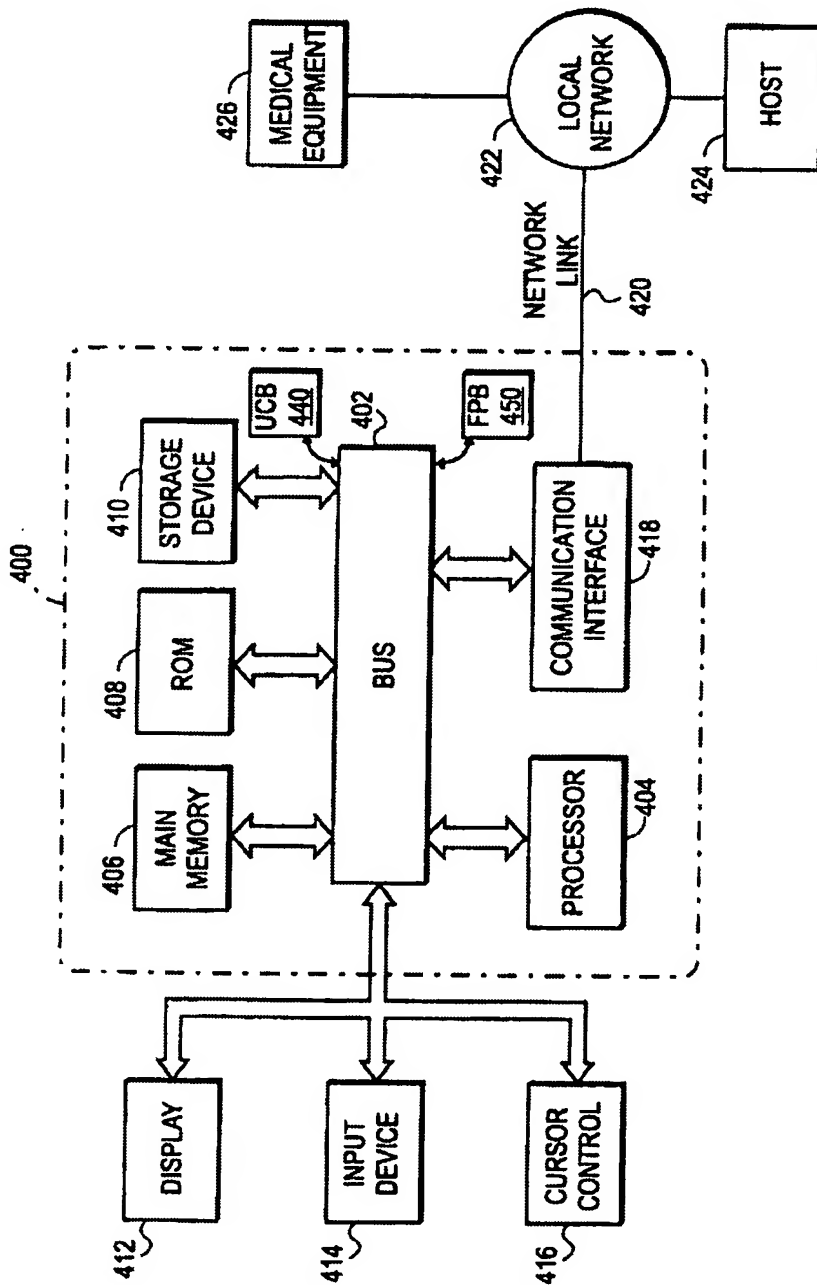


FIG. 3

**FIG. 4**